Thank you for your comment, Emily Kennedy.

The comment tracking number that has been assigned to your comment is OSTS2012D50310.

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OSTS 2012 Draft PEIS

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Privacy Preference: Don't withhold name or address from public record Attachment: API Letter to BLM on OSTS DPEIS 05 04 12 Final.pdf

Comment Submitted:

Please accept the following attached comments on behalf of the American Petroleum Institute.

Thank you,

Emily Kennedy



May 4, 2012

Oil Shale and Tar Sands Resources Draft Programmatic EIS Argonne National Laboratory, 9700 South Case Avenue – EVS/240 Argonne, IL 60439

## Submitted Online via the Public Comment Forum link at http://ostseis.anl.gov

#### To Whom It May Concern:

The American Petroleum Institute (API) offers the following comments on the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming* published by the Department of Interior (DOI) Bureau of Land Management (BLM) in January 2012.

The API is a trade association representing over 500 companies involved in all aspects of the oil and natural gas industry, including the development of oil shale and oil sands as a future energy supply in the United States. The API has formed an Oil Shale Subcommittee with the goal of addressing issues associated with oil shale development and educating policy-makers and the public at large on this important domestic energy resource. Our members are greatly interested in leasing and developing oil shale and oil sands resources found on lands managed by the BLM in Colorado, Utah and Wyoming. Oil Shale Subcommittee members, and the oil shale industry as a whole, are committed to delivering technologies and best practices that will allow for the development of oil shale in an environmentally sustainable manner.

#### Intent of the United States Congress in Establishing an Oil Shale Program under EPAct 2005

As we have with previous written comments to the Bureau of Land Management on its management of the federal oil shale program, API would like to reiterate the intent of the United States Congress in establishing a program under the Energy Policy Act of 2005.

The U.S. Congress recognized the critical and urgent need for development of domestic energy resources when it enacted the Oil Shale, Tar Sands and Other Strategic Unconventional Fuels Act of 2005, as part of the Energy Policy Act of 2005 (EPAct 2005):

"Congress declares that it is the policy of the United States that...oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." (EPAct §369(b); Public Law 109-58)

EPAct 2005 directed the Department of the Interior to promote commercial development of oil shale resources by making land available within each of the States of Colorado, Utah and Wyoming for leasing to conduct Research, Development and Demonstration (R, D, and D) of technologies to recover liquid fuels from oil shale. The Department of the Interior was charged with the creation of an oil shale and oil sands research and development leasing program. The Department of Energy, and expressly the Office of Petroleum Reserves, was directed to create and implement a "commercial strategic fuels development program".

With the passage of the Energy Policy Act of 2005, Section 369, the Congress and the President forwarded a clear message to the American people of its intention to evaluate and to develop the massive multi-trillion barrel energy source locked in its domestic unconventional hydrocarbon resources, such as oil shale, oil sands, and coal. Congress reiterated the extreme importance of those resources to the national energy security of the nation, while recognizing that development must be accomplished in an "environmentally sound manner and that development should emphasize sustainability".

The intent of EPAct 2005 was that the Department of Interior *shall* establish a royalty rate to "encourage development of oil shale and tar sand resources," "make available" public lands to "conduct research and development activities with respect to technologies for the recovery of liquid fuels from oil shale," and promulgate regulations establishing "a commercial leasing program for oil shale."

It is API's assertion that the lawsuit and settlement agreement with several non-governmental organizations is driving current Administration policy toward reconfiguring the federal oil shale program under the 2012 PEIS. It is further our assertion that all policy and regulatory decisions made by the BLM on development of oil shale on federal lands should be made under the context of Section 369 of EPAct 2005.

#### **Request for Extension of Comment Period**

The comments on the January 2012 OSTS Draft Programmatic Environmental Impact Statement (DPEIS) to amend the BLM Resource Management Plans (RMPs) are due May 4, 2012. The current public comment period does not provide sufficient time for API to analyze the Draft PEIS' 1900 pages of technical analysis, consult its membership, and address the numerous and complex issues which could impact our members. In addition, under the settlement agreement with environmental organizations dated February 15, 2011 concerning the 2008 Final Oil Shale and Tar Sands (OSTS) Programmatic Environmental Impact Statement (PEIS), BLM is required to issue proposed rules to amend the existing oil shale leasing regulations by May 15, 2012. Given the connection between the RMP amendments and the oil shale leasing regulations, API recommends that BLM extend the public comment period on the DPEIS so that the public can fully understand and comment on these closely-related matters. As such, API recommends that BLM extend the DPEIS comment period until July 3, 2012 to allow thoughtful development and submission of comments to the docket.

## **Background**

In September 2008, BLM issued a Final Oil Shale and Tar Sands (OSTS) Programmatic Environmental Impact Statement (PEIS) analyzing the environmental and socioeconomic impacts of amending 12 land use plans in Colorado, Utah, and Wyoming to designate public lands administered by the BLM as available for commercial leasing for oil shale or oil sands development. No actual oil shale or oil sands leasing was approved under the 2008 OSTS PEIS as the analysis only identified those BLM lands where oil shale and oil sands lease applications would be accepted and resulted in amendments to the corresponding BLM RMPs. Separate National Environmental Policy Act (NEPA) analyses (including compliance with the Section 7 of the Endangered Species Act) would be required before leasing or site development activities could occur. As such, there are multiple future opportunities for site-specific environmental analyses and project-specific NEPA reviews.

The land allocation decisions established by BLM's 2008 land use plan amendments were challenged in a lawsuit brought by several environmental organizations in January 2009. As part of a settlement agreement entered into by the United States to resolve the lawsuit, the BLM agreed to take another look at the land use allocations resulting from the 2008 OSTS PEIS (now covered under 10 land use plans after some consolidation), and to consider excluding certain lands from future leasing of oil shale and oil sands resources. The settlement mandated that the new NEPA analysis must include a specific alternative that would amend BLM land use plans to restrict the lands available for potential applications for oil shale and oil sands leasing (identified as Alternatives 2a and 2b for oil shale and Alternative 2 for tar sands in the current DPEIS). As a result, BLM is reassessing its 2008 decision that made 1,991,222 acres available for potential development of oil shale and approximately 431,224 acres of public land available for potential development of tar sands. On February 3, 2012, the U.S. Environmental Protection Agency published a Notice of Availability of the BLM OSTS DPEIS regarding possible land use plan amendments affecting oil shale and tar sands allocation on BLM administered lands. Comments regarding the 2012 OSTS DPEIS are due May 4, 2012.

The primary differences between the new 2012 OSTS DPEIS and the 2008 OSTS PEIS on this same subject, is that the current document contains several alternatives (Alternative 2 - the Conservation Focus Alternative, and Alternative 3 - the Research Lands Focus Alternative) that would dramatically reduce the acreage of BLM administered land for which applications for oil shale and oil sands leases could be submitted. Alternative 4 (the Moderate Development Alternative) would be similar to that adopted in the 2008 OSTS PEIS land use allocations except that the Adobe Town "Very Rare or Uncommon" area lands (180,910 acres) designated by the Wyoming Environmental Quality Council in 2008 and BLM designated Areas of Critical Environmental Concern (ACEC) identified in the 2008 OSTS PEIS (76,666 acres - and those ACECs recently established by BLM in Wyoming and Utah) would be excluded from oil shale and oil sands leasing. Under Alternative 1, the No Action Alternative, no existing land use plans would be amended. Alternatives 2b and 4b only apply to oil shale but would first require a company to obtain and comply with all of the provisions of a Research Development and Demonstration (RD&D) lease before it could be later converted to a commercial lease.

BLM has chosen Alternative 2(b) as the preferred alternative for oil shale, and Alternative 2 as the preferred alternative for oil sands. These alternatives are described more fully below. Alternative 2a is also described below because it informs the agency's preferred alternatives for oil shale and oil sands.

<u>Alternative 2a: Conservation Focus Alternative, Oil Shale.</u> Under this alternative, 10 land use plans in Colorado, Utah, and Wyoming would be amended to designate less than 830,000 acres (acreage opened under Alternative C in the 2008 OSTS PEIS) as available

for future commercial oil shale leasing. BLM estimates the final area available under Alternative 2a to be 461,965 acres. This alternative would exclude from commercial oil shale leasing the following categories or groups of categories of public lands:

- 1. All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics (LWC);
- The whole of the Adobe Town "Very Rare or Uncommon" area, as designated by the Wyoming Environment Quality Council on April 10, 2008 (180,910 acres total; 167,517 acres of public land, of which 10,920 acres are already a BLM Wilderness Study Area [WSA]);
- 3. Core or priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue;
- 4. All Areas of Critical Environmental Concern (ACECs) located within the areas analyzed in the 2008 OSTS PEIS (76,666 acres in existing ACECs in the 2008 OSTS PEIS plus additional ACEC acreages as a result of Utah and Wyoming planning efforts recently completed); and
- 5. All areas identified as excluded from commercial oil shale and tar sands leasing in Alternative C of the September 2008 OSTS PEIS (Alternative C made 830,296 acres available for potential commercial oil shale leasing and 229,038 acres available for potential commercial tar sands leasing).

<u>Alternative 2b, RD&D First Requirement, Oil Shale</u>. Under this alternative, the lands open for future oil shale leasing consideration would be the same as those in Alternative 2(a), but only for RD&D leases. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease.

<u>Alternative 2, Conservation Focus Alternative, Tar Sands</u>. Under this alternative, six land use plans in Utah would be amended to designate less than 229,000 acres (acreage opened under Alternative C of the 2008 plan amendment) as available for future commercial tar sands leasing. This alternative would exclude from commercial oil shale leasing the same categories or groups of categories of public lands and/or their resource values as listed above under Alternative 2, Oil Shale. The final area proposed for potential leasing under BLM's tar sands Alternative 2 was estimated as 91,045 acres.

#### **API's Preferred Alternative**

API and its member companies strongly support Alternative 1, the No Action Alternative. There is no compelling reason to change BLM's well researched and thoroughly considered oil shale and oil sands leasing decisions made in 2008.

The analysis in the current 2012 OSTS DPEIS does not support the adoption of alternatives other than Alternative 1. API notes that the other alternatives do not fully comply with Congressional intent established in Section 369 of the Energy Policy Act of 2005 to promote the orderly development of oil shale, oil sands, and other unconventional fuels or current U.S. government initiatives to expand domestic oil and gas production. API is strongly opposed to Alternatives 2a and 2b (for oil shale)

Alternative 2 (for oil sands), and Alternative 3 (as applied to both oil shale and oil sands) as they severely restrict the lands available for potential oil shale and oil sands leasing. While inferior to Alternative 1, Alternative 4 (and its various sub-alternatives for oil shale) is acceptable to API as substantial acreage remains available for oil shale leasing applications under this alternative.

### API Opposes BLM's Preferred Alternatives.

API is strongly opposed to BLM's selection of Alternative 2b for oil shale and Alternative 2 for oil sands as the preferred alternatives. If adopted, these alternatives would dramatically reduce the amount of land potentially available for oil shale leasing from 2,017,714 (slightly revised from the 2008 OSTS PEIS) to 461,965 acres (22.89% of the original allocation) and the land potentially available for oil sands leasing from 430,686 to 91,045 acres (21.14% of the original allocation).

Although not listed as BLM's preferred alternative, Alternative 3 would also severely limit leasing opportunities to only those areas where there is an existing oil shale RD&D lease signed at the time of the 2012 OSTS Record of Decision is issued (a maximum of 32,640 acres including the Preference Right Lease Areas associated with each RD&D lease). For oil sands, only the pending Asphalt Ridge lease application south of Vernal, Utah covering approximately 2,100 acres is included. If selected, Alternative 3 represents over 98% reduction in area available for potential lease applications and development for oil shale and more than 99.5% reduction in the area now available for potential oil sands lease applications and development (as compared to the existing allocations approved under the 2008 OSTS PEIS ROD).

Alternative 4a may be acceptable; however, API is opposed to Alternative 4b. While the same lands would be available for oil shale leasing under Alternatives 4a and 4b, Alternative 4b would require companies to first obtain a Research, Development, and Demonstration (RD&D) lease before the lease could be converted to a commercial lease. API believes this requirement will be an unnecessary, expensive, and time-consuming step in the future as oil shale and oil sands development technology matures.

API believes that Alternative 1 (the No Action Alternative) is the right choice for the preferred alternative and believes that the majority of the other alternatives do not comply with the Congressional mandate to promote the responsible development of this important energy resource. The result is greater future dependence on foreign sources of oil and gas and corresponding loss of potential new U.S. jobs and economic activity. API believes that BLM's severe restriction of potential oil shale and oil sands leasing opportunities in the 2012 OSTS DPEIS alternatives represents an unfortunate lack of planning and poor public policy.

#### **API's Detailed Comments**

Our review of the document identified a number of areas where we believe further attention to the statements made is worthwhile on the part of BLM's authors. We have attached one document that contains more detailed comments on the DPEIS. Attachment 1, Comments on the DPEIS for Allocation of Resources, is a table that presents comments that generally reference a specific section or page within the DPEIS. The comments are designed to assist in refining the DPEIS and in several instances describe typographical or other errors noted in the document.

The paragraphs below also provide additional API comments and recommendations on the January 2012 DPEIS.

#### **General Comments**

API is disappointed in the tone and abrupt change in direction from that presented in the original 2008 OSTS PEIS. The current document does not provide credible factual, legal or policy reasons for proposing to amend the ten Resource Management Plans (RMPs) at this time. Rather, BLM offers two reasons for the proposed RMP amendments: (1) the agency committed to revisit the RMPs as part of the 2011 lawsuit settlement agreement with environmental organizations; and (2) new information has come to light that was not available in 2008. A review of the "new information" described in Section 1.1.1. at page 1-5 includes a list of routine developments that combined do not rise to a level requiring that a new NEPA analysis be conducted of the oil shale and oil sands land use plan allocations made in the 2008 OSTS PEIS Record of Decision (ROD), including:

- a. A recently completed U.S. Geological Survey (USGS) in-place assessment of oil shale and nahcolite resources in Colorado, Utah, and Wyoming.
- b. A March 2010 U.S. Fish and Wildlife Service (USFWS) Notice of Petition Findings, Endangered Wildlife and Plants, 12-Month Findings to List the Greater Sage-Grouse as Threatened or Endangered (75 FR 13910), concluding that while listing was warranted, it was precluded by higher priority listing actions.
- c. BLM recently completed updating its inventory of lands having wilderness characteristics (LWC) in each of the three states for the planning area, and the status of several areas originally proposed to be Areas of Critical Environmental Concern (ACECs) in Utah has changed since the preparation of the 2008 OSTS PEIS.

API believes that the "new information" described above represents routine resource management updates and could have been easily accommodated within the context of required lease sale or other project-specific NEPA and Endangered Species Act reviews. In fact, BLM chose not to use the new USGS in place assessment of oil shale and nahcolite resources in Colorado, Utah, and Wyoming to update the boundaries of the 2012 OSTS DPEIS study area (see Section 2.5.1 at page 2-77). The routine nature of the "new information" leads API to the conclusion that the only reason the 2008 OSTS PEIS is being reconsidered now is to accommodate the 2011 settlement with environmental organizations that included the reassessment as a component of the settlement.

API notes that BLM's publication of the 2012 OSTS DPEIS constitutes an abrupt change in direction on the entire federal oil shale and oil sands leasing program in the face of a routine legal challenge from special interest groups. This is disappointing because the U.S. oil shale and oil sands industry needs consistency in federal policy and regulation to provide the confidence needed to make continued investments in technology and demonstration projects. The industry was hopeful that Section 369 of the Energy Policy Act of 2005 would provide federal agencies with the clear intent of Congress to support the responsible development of oil shale and oil sand resources and technology. The new 2012 OSTS DPEIS represents a significant step backwards in this regard.

API believes that BLM's efforts to reexamine the existing RMPs as part of a settlement agreement does not provide an independent basis to amend the RMPs absent some other reasoned decision making. While BLM has the discretion to reopen both the RMPs and the oil shale leasing rules, it should not do so based on arbitrary reasons. Moreover, it cannot violate Congressional intent to encourage research and development of oil shale and oil sands resources located on public lands.

#### The Document Improperly Abandons/Ignores the Convincing Analysis in the 2008 OSTS PEIS

The 2008 OSTS PEIS and subsequent ROD were well researched and written, and compliant with NEPA and other applicable laws and regulations. API believes that the ROD for the 2008 OSTS PEIS reached logical and appropriate conclusions regarding land use plan amendments for allocation of oil shale and oil sands resources on lands administered by BLM. Under the ROD approving the 2008 OSTS PEIS and land use plan amendments, eight land use plans were amended to designate 1,991,222 acres as available for application for commercial oil shale leasing. Specifically, the lands that were available for application include all lands within the most geologically prospective oil shale areas that are BLM-administered public lands. The rational for this decision (Alternative B in the 2008 OSTS PEIS) is extremely instructive in the current case and API recommends that BLM carefully review their prior conclusions in this matter to inform the current analysis. This important discussion in the 2008 OSTS PEIS ROD is repeated below for emphasis:

## BLM's 2008 OSTS PEIS ROD beginning at Page 16.

"Alternative B for oil shale was selected as the Proposed Plan Amendment based on: 1) its consistency with the requirements of the Energy Policy Act of 2005, 2) its balanced use and protection of resources, 3) the FPEIS's analysis of potential environmental impacts, and 4) the comments and recommendations from cooperating agencies and the public.

Alternative B is structured to be consistent with the congressional mandate of the Energy Policy Act to emphasize the "most geologically prospective lands in Colorado, Utah and Wyoming" as available for application for leasing. Alternative B, therefore, identifies and offers the most geologically prospective acreage (based on grade and thickness of the oil shale deposits) of the Green River Formation located in the Piceance, Uinta, Green River, and Washakie Basins of Colorado, Utah, and Wyoming. As compared with Alternative C, Alternative B makes more Federal oil shale available for application, and provides for fewer fragmented tracts. Alternative B also provides for more contiguous tracts that could be configured for economically and technically feasible extraction or recovery of the resources. Alternative B would also allow access to more of the most geologically prospective oil shale lands, particularly in Colorado.

Unlike Alternative C, which excludes lands based on existing management decisions for oil and gas development, Alternative B provides the decisionmaker with the discretion to balance the oil shale use and protection of resources on the public lands during subsequent site-specific NEPA analysis (emphasis added). This balanced approach is consistent with FLPMA (Federal Land Policy Management Act) principles of "multiple use," and "sustained yield." The requirement to perform future NEPA analyses and to comply with other environmental laws allows the decisionmaker to optimize the recovery of energy resources, to establish appropriate lease stipulations to mitigate anticipated impacts, or to fully protect a resource or resource value by choosing not to offer an area for lease at any particular time. Even if some technologies may not allow mining of some tracts to proceed without unacceptable impacts to other resource values, Alternative B would allow the agency the opportunity to choose to offer leases when a technology is proposed that can be used compatibly with the resource values in question. This is consistent with the comments that supported a viable and sustainable commercial oil shale leasing program, while ensuring that any impacts to

sensitive resources or resource values are mitigated to any commercial development (emphasis added). It is also consistent with the planning decisions for other mineral resources for these parcels which authorize leasing subject to restrictive conditions, rather than preclude leasing altogether.

Alternative B does, however, exclude certain lands within the most geologically prospective oil shale areas under the basis of existing laws and regulations, executive orders and other administrative designations or withdrawal. These include WSAs, National Monuments, WSRs, NCAs, and existing ACECs that are closed to mineral development."

BLM used similar language in the 2008 OSTS PEIS ROD at page 31 regarding the selection of Alternative B for oil sands development by amending four land use plans to designate a total of 431,224 acres available for application for commercial oil sands leasing. The key drivers for selection that BLM identified were compliance with the Energy Policy Act of 2005, a balanced use of natural resources, maintaining decisionmaker discretion, and maintaining the proper role of subsequent NEPA analysis in the decisionmaking process.

It is also instructive to review the logic BLM used in not selecting Alternative C in the 2008 OSTS PEIS ROD (which would have significantly reduced the lands available for potential leasing and development of oil shale and oil sands resources). In describing their logic for not selecting Alternative C regarding oil shale, BLM concluded the following:

### BLM's 2008 OSTS PEIS ROD beginning at Page 22.

"Alternative C was not selected as the Proposed Plan Amendment because the alternative would not make the "most geologically prospective lands in Colorado, Utah and Wyoming" as available for application for leasing. Thus it is not fully consistent with the mandate of the Energy Policy Act of 2005. Much of the most geologically prospective acreage would be excluded under Alternative C; in particular areas which are in close proximity to three of the six RD&D leases would be excluded. In addition, this unreasonably fragments the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed. This could be an impediment to sound and rational development of the resource and can reduce the economic return to the public. If oil shale resources are by-passed because of the exclusions in Alternative C, that could also limit the benefits to the nation from exploitation of a domestic unconventional energy source. Selection of alternative C precipitously limits or restricts the decisionmaker's discretion to balance oil shale use and the protection of resources or resource values, in accordance with FLPMA's principal of "multiple use." "

All of the iterations of Alternatives 2 and 3 of the 2012 OSTS DPEIS make significantly less acreage available for potential for oil shale and oil sands leasing than was offered under Alternative C of the 2008 OSTS PEIS. API can only assume that BLM's well considered analysis from 2008 would apply equally to current Alternatives 2a and 2b for oil shale and Alternatives 2 and 3 for oil sands. API strongly supports the sound logic and balanced approach taken by BLM in the Record of Decision on the 2008 OSTS PEIS. In view of the above, API strongly encourages BLM to reconsider their "preferred alternatives" of 2b for oil shale and Alternative 2 for oil sands.

## The Document Fails to Meet the Intent of the Energy Policy Act of 2005

In August 2005, the U.S. Congress enacted the Energy Policy Act of 2005, Public Law (P.L.) 109-58. In Section 369 of this Act, also known as the "Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels Act of 2005," Congress declared that oil shale and oil sands (and other unconventional fuels) are strategically important domestic energy resources that should be developed to reduce the Nation's growing dependence on oil from politically and economically unstable foreign sources. To support this declaration of policy, Congress directed the Secretary of the Interior (the Secretary) to undertake a series of steps, several of which are directly related to the development of a commercial leasing program for oil shale and oil sands.

Compliance with Section 369 of the Energy Policy Act of 2005 is mandatory for Federal agencies, including BLM. The preferred alternatives (Alternative 2b for oil shale and Alternative 2 for oil sands) substantially reduce the acreage of lands potentially available for oil shale and oil sands leasing, but BLM does not explain in the 2012 OSTS DPEIS how the RMP amendments (particularly Alternatives 2a, 2b, and 3) are consistent with Section 369 of the Energy Policy Act of 2005, which encourages commercial leasing of oil shale and oil sands. Moreover, the proposed RMP amendments and upcoming revisions to the oil shale leasing regulations have effectively eliminated the regulatory certainty Congress intended to establish to encourage oil shale and oil sands investment. In the 2012 OSTS DPEIS, BLM and DOI appear to be using agency policy decisions to obstruct existing Federal Law. In selecting Alternative 2(b), BLM says the only path to potential commercial oil shale production is through the RD&D Program. However, the Energy Policy Act of 2005 specifically mandated that BLM establish a competitive commercial leasing program that is separate and distinct from the RD&D program.

#### The Document Fails to Support Executive Branch Efforts to Expand U.S, Domestic Energy Production

Speaking at the Cushing Pipe Yard in Cushing Oklahoma on March 22, 2012, President Obama clearly articulated the Administration's position on U.S. energy policy. The President described an "all-of-the-above" energy strategy to "keep us on track to further reduce our dependence on foreign oil, put more people back to work, and ultimately curb the spike in gas prices that we are seeing year after year after year". President Obama went on to say "so yes we're going to keep on drilling. Yes we're going to keep on emphasizing production. Yes we're going to make sure we can get the oil to where it is needed." The President noted that renewable energy, new clean energy sources, and improving energy efficiency were also part of the "all-of-the-above" strategy. The President observed that "We want every source of American made energy. I don't want the energy jobs of tomorrow going to other countries. I want them here in the United States of America. And that's what an all-of-the-above strategy is all about. That's how we break our dependence on foreign oil." The President's message was clear.

Nearly seven years since the passage of the Energy Policy Act, global oil demand has increased, markets have become tighter, and instability in the Middle East and Africa have caused prices to jump markedly, almost doubling, to close to \$110 a barrel, which only underscores our country's alarming dependence on foreign oil supplies. These recent events and continued political instability in the Middle East underscore the critical importance of domestic oil shale and oil sands resources to our national security and strategic interests. The clear policy direction as provided in EPAct 2005 indicates the paramount importance of oil shale development to meet urgent national energy needs.

BLM's 2012 OSTS DPEIS fails to supports the President's "all-of-the-above" energy strategy to encourage domestic energy production from significant oil shale and oil sands deposits. Estimates for the oil shale resource in Colorado, Utah, and Wyoming are placed at between 1.2 and 1.8 trillion barrels of oil

equivalent of resource in the ground with as much as 500 billion to 1.1 trillion barrels of oil that is considered potentially recoverable. It is with a sense of incredulity that with a gallon of gasoline surging to above \$4 in many parts of the country, we are urging an agency of the Obama Administration to keep American energy supplies on the table for development.

As agencies of the Executive Branch, DOI and BLM are obligated to actively support and assist in implementing the President's energy strategy. Such support is more likely to resemble the alternatives selected in the Record of Decision (ROD) for the 2008 OSTS PEIS than BLM's preferred alternatives presented in the 2012 OSTS DPEIS. In fact, supporting the President's policies requires that BLM abandon the agency's current Preferred Alternatives 2b (for oil shale) and 2 (for oil sands) in favor of Alternative 1 (the No Action Alternative).

## The Purpose and Need of the DPEIS is Defective and Fails to Comply with the Intent of NEPA

The 2012 OSTS DPEIS is biased in that it describes the probable outcome of the NEPA analysis within the purpose and need Statement. Page 1-4 of the DPEIS reads as follows:

"As noted above, the BLM has decided to reconsider the 2008 allocations. The purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development. Specifically, the BLM will consider amending the applicable RMPs to specify whether any areas in Colorado, Utah, and Wyoming currently open for application for future leasing and development of oil shale or tar sands should not be available for such application for leasing and development (emphasis added)."

This purpose and need statement portends the outcome of this supposedly unbiased NEPA analysis by stating that the document will only consider removing lands from those areas currently approved to receive oil shale and oil sands lease applications. There is no consideration of expanding the currently available oil shale and oil sands leasing areas even in the face of potential domestic energy shortages or the recent spike in U.S. gasoline prices. The expected outcome of the analysis is quickly confirmed in Section 2.4.4 at page 2-76 where BLM identifies Alternative 2b (for oil shale) and Alternative 2 (for oil sands) as the agency's preferred alternatives. Both of these alternatives severely contract the public lands available for receiving applications for oil shale and oil sands leasing and possible future development.

In stark contrast to the predetermined outcome identified in the purpose and need of the 2012 OSTS DPEIS, the 2008 OSTS PEIS identifies the purpose and need of the NEPA document "to meet the requirements of the Energy Policy Act of 2005". This is a vastly superior NEPA approach because it does not drive the analysis to a predetermined outcome. The NEPA analysis contained in the current document has been structured so that it inappropriately bends to meet the requirements of the 2011 settlement agreement rather than representing a fresh look at the issues.

API recommends that the purpose and need statement be rewritten to be more neutral or should adopt the original purpose and need statement from the 2008 OSTS PEIS.

### The 2012 OSTS DPEIS Fails to Follow the Prescribed "Multi-Step" NEPA Process

The 2012 OSTS DPEIS clearly states that the document is the first step in a multi-step NEPA process. This first step considers potential impacts associated with amending 10 BLM Resource Management Plans

(RMPs) to identify appropriate lands for receiving applications for oil shale and oil sands leases and future development. The 2012 OSTS DPEIS notes in multiple places that subsequent site-specific NEPA analyses will be required for issuing RD&D leases and for those cases where a RD&D lease is converted into a commercial lease (e.g. 2012 OSTS DPEIS at Section 1.1.1 page 1-6 lines 8-23 and Section 1.4.1 page 1-17 lines 32-38). As such there will be multiple opportunities for public review and site-specific analyses of proposed oil shale and oil sands leases and development. Alternatives 2a, 2b, and 3 in the 2102 OSTS DPEIS fail to properly account for and utilize these subsequent NEPA reviews because they prematurely remove large areas of potential oil shale and oil sands leasing without allowing proper site-specific environmental reviews.

These alternatives fail to properly acknowledge the multi-step NEPA review process that follows inclusion of BLM lands in agency land use plans as available for consideration of oil shale and oil sands lease applications. This top-down resource management approach relegates the local or regional BLM land manager to that of an observer rather than a participant in resource management decisionmaking. This local resource "management from Washington DC" approach could have the unintended consequence of restricting important domestic energy development opportunities without receiving the input of commercial energy interests, workers, local land managers, other government agencies, special interest groups, and the affected public. Furthermore, Alternatives 2a, 2b, and 3 in the 2102 OSTS DPEIS do not provide for the necessary fine scale (site-specific) environmental reviews that can effectively reconcile necessary resource protections with ongoing needs for developing additional domestic energy resources. The restrictive "policy level" edicts contained in Alternatives 2 and 3 of the 2012 OSTS DPEIS are not appropriate for this high-level NEPA screening phase of the process because they may inappropriately preclude important energy development by not allowing the needed lease specific NEPA review to occur.

# Alternatives 2 and 3 of the 2012 OSTS DPEIS Inappropriately Restrict the Role of Local/Regional BLM Land Managers

In addition to shortcutting the NEPA process, the 2012 OSTS DPEIS inappropriately restricts the authority of the Federal Land Manager by identifying a host of criteria that would automatically withdraw BLM administered lands from potential leasing for oil shale and oil sands development. In comparison, the 2008 OSTS PEIS ROD describes a process that includes more acreage for potential applications for oil shale and oil sands leases and properly engages local and regional BLM land managers in the resource allocation and management decisionmaking process. Each potential application would be subject to a lease sale NEPA review and a project specific NEPA review. This approach provides the decisionmaker with the discretion to balance the oil shale and oil sands use and protection of resources on the public lands during subsequent site-specific NEPA analysis. These NEPA reviews are the appropriate administrative venue for considering site-specific environmental issues such as ACEC designations or the specific protections needed for threatened and endangered species (or candidate species such as the greater sage-grouse) under Section 7 of the Endangered Species Act. It is inappropriate to remove this site-specific resource management responsibility from BLM land managers.

In discussing the logic for not selecting Alternative C (which would have significantly limited the acreage of lands available for receiving oil shale and oil sands lease applications) contained in the 2008 OSTS PEIS, BLM clearly articulated their thoughts on this matter as shown below:

#### BLM's 2008 OSTS PEIS ROD beginning at Page 22.

"Selection of alternative C precipitously limits or restricts the decisionmaker's discretion to balance oil shale use and the protection of resources or resource values, in accordance

with FLPMA's principal of "multiple use." Although as presently being researched, in situ oil shale extraction would have many impacts similar to those of oil and gas development, exclusion of areas based on existing management prescriptions (e.g., no surface disturbance or seasonal limitation that are in place for oil and gas leasing) unnecessarily speculates upon the nature and degree of impacts that would be caused by future oil shale development. It would be premature to eliminate areas prior to site-specific analysis based on factors that are not known now, but that would be known at the leasing or operation permitting stages, such as location, timing and type of oil shale technology, that may show that these resources could be adequately protected through mitigation."

API agrees with the resource management approach and convincing logic articulated by BLM on the topic of oil shale and oil sands leasing in the 2008 OSTS PEIS ROD. API suggests that the authors of the 2012 OSTS DPEIS review the current document and make necessary adjustments to restore the proper balance of potential oil shale and oil sands use and the protection of resources or resource values. In making these adjustments, API recommends that the proper role of site and project-specific environmental reviews and federal land manager discretion be emphasized.

# Conservation Focus Alternative 2a and 2b for Oil Shale and Alternative 2 for Oil Sands are Defective and Do Not Comply with NEPA

NEPA requires that agency alternatives be well defined so that both agency decisionmakers and the general public can understand the reasonably foreseeable impacts associated with each alternative. As currently constructed, Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands do not meet that requirement. This is particularly true with the component of Alternative 2a and 2b (oil shale) and Alternative 2 (oil sands) that states that "core or priority sage-grouse habitat, as defined by such auidance as the BLM or the DOI may issue" would be excluded from the lands available for potential leasing applications. These alternatives also include a similar non-specific statement excluding areas from oil shale and oil sands leasing that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics (LWC). The lack of clarity regarding the current restrictions posed by Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands, combined with the open-ended nature of what constitutes "core or priority sage-grouse habitat" and the unknown future requirements of the "guidance as BLM or the DOI may issue", make it virtually impossible for oil shale and oil sands interests to either identify the excluded lands or understand any associated restrictions. API contends that this lack of clarity as to the specifics of these alternatives makes them defective from a NEPA process perspective and potentially from a legal perspective, as well.

# The Sage-Grouse Related Restrictions are Premature and there are Other, Less-Onerous, Methods of Achieving Sage Grouse Protection

API believes that withdrawing lands from potential oil shale and oil sands leasing due to sage-grouse habitat protection is premature given that no specific federal regulatory or administrative actions have occurred with respect to managing core or priority sage-grouse habitat. As a result, these alternatives are vague and poorly defined making it difficult for interested parties to accurately identify the lands that are being withdrawn from potential leasing. API strongly objects to the provisions of Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands that would result in the wholesale exclusion of core or priority sage-grouse habitat from future lease sale applications and believes that greater sage-grouse protection and management can be effectively achieved without the use of such draconian measures.

Wholesale removal of hundreds of thousands of acres of potential energy resources from possible future leasing based on the limited analysis contained in the OSTS DPEIS is clearly inappropriate.

API believes that the potential leasing acreage being eliminated, at least at the PEIS stage, as a result of the greater sage-grouse is unnecessary and is not supported by the analysis contained in the DPEIS. The current programmatic document is not the appropriate stage in the NEPA process to make these site-specific determinations. API supports further detailed analysis of potential greater sage-grouse impacts and site-specific mitigation measures in future lease sale or project-specific NEPA documents where the scale of the evaluation is finer and additional (and site-specific) greater sage-grouse data is available. In addition, the use of suggested management practices may make it possible to site future oil shale and oil sands projects without causing unacceptable impacts to the greater sage-grouse. API believes that there are compatible opportunities to further develop oil shale and oil sands energy resources while simultaneously protecting the greater sage-grouse. As such, API believes that coarse scale greater sage-grouse habitat mapping should not be used to automatically eliminate large areas of important energy resources from future consideration.

API points to the large text box at Section 4.8.1 beginning at page 4-124 of the 2012 OSTS DPEIS that describes greater sage-grouse habits and habitats and identifies a number of measures and suggested management practices that can be used to reduce or eliminate harm to the greater sage-grouse. API and our member companies recognize that implementing some of these management practices could result in specific areas being excluded from potential oil shale and oil sands leasing and development. Nonetheless, we believe that the site-specific approach for greater sage-grouse management described in Alternatives 1 and 4 for oil shale and oil sands is superior to the inappropriate and restrictive approaches included in the various iterations of Alternatives 2 and 3.

#### Alternative 2b and 4b for Oil Shale Could Result in Unnecessary Project Delays

API is opposed to Alternative 2b. While the same lands would be available for oil shale leasing under Alternatives 2a and 2b, Alternative 2b would require companies to first obtain a Research, Development, and Demonstration (RD&D) lease before the lease could be converted to a commercial lease. API believes this requirement will be an unnecessary, expensive, and time-consuming step in the future as oil shale and oil sands development technology matures. API also believes that RD&D leases as the current sole lease interest is contrary to the EPAct 2005 direction to implement a commercial leasing program. Alternative 2b is predicated on the inappropriate conclusion that oil shale energy projects will operate indefinitely in a research and development mode. Once technically sound and environmentally acceptable technologies have been developed under the current RD&D program, there is no reason to require all future commercial oil shale lease applications using the same technology to repeat the cumbersome RD&D process. While BLM could amend appropriate RMPs in the future to allow direct commercial applications using proven oil shale technology, the amendment process is time consuming and will result in significant project delays. The same unnecessary project delays described above for oil shale Alternative 2b would also apply to Alternative 4b.

# Water Use Estimates in the 2012 OSTS DPEIS do not Reflect Current Patterns and Result in Unrealistically High Water Use Estimates

Although some uncertainty remains regarding the potential water use from various oil shale development technologies, API notes that the 2012 OSTS DPEIS has assumed a worst case scenario. The analysis does not provide any credit for water recovery from oil shale processing or reuse of water from other local mineral extraction industries (water used or recovered for local oil and gas operations). The

analysis also includes significant additional water use associated with coal-fired power production that it assumes will be built to support the oil shale industry. Even with these worst-case scenario assumptions, the document concludes that there is sufficient water currently available to support a robust oil shale industry and also serve other needs for the foreseeable future.

The 2012 OSTS DPEIS evaluates potential impacts using the assumption that any additional power needed to operate RD&D or commercial oil shale projects would be provided by expanding or building new coal-fired power plants (Section 4.1.6 at page 4-13). BLM advises that they made this assumption to avoid the possibility of underestimating potential impacts. API believes that this assumption is inappropriate and does not reflect the ongoing changes to the power production marketplace in Colorado, Wyoming, and Utah resulting from the rapid expansion of natural gas production in this region. There are multiple examples of power plants switching to burning natural gas in this region with resulting decreases in both air emissions and water use as compared to coal-fired power plants of equivalent capacity (see for instance the April 12, 2012 article in the Wyofile online news service regarding a Wyoming power plant making plans to switch from coal to natural gas fired generation at an existing facility at http://wyofile.com/2012/04/utility-wants-to-convert-wyoming-coal-unit-to-naturalgas/). API urges BLM to review the trends in natural gas power plant construction (and switching) in the region and revise the water use section of the 2012 OSTS DPEIS to make a more realistic estimate of potential water use in oil shale operations. The current pessimistic water use assumptions are not supported by the facts on the ground. While the NEPA process supports an impact analysis that is conservative, it does not require one that is unrealistic.

In any event, API notes that water rights are unique in these western states and that potential oil shale projects would have to acquire these rights in the state and local water marketplace like other current and future water users. There is every indication that necessary water rights will be available to support a robust oil shale industry in Colorado, Utah, and Wyoming. The input from our members strongly suggests that an objective examination of available technologies and costs would conclude that responsible, low-impact, and sustainable water usage is both technically and economically feasible for an oil shale industry producing one to two million barrels per day.

The member companies of the API Oil Shale Subcommittee are committing significant capital and research toward developing technologies and processes to reduce energy usage in their projects while protecting ground and surface water resources. Many of these same firms are collaborating under BLM's RD&D leasing program, under which the developer has to successfully verify to the BLM that its technology is viable, environmentally acceptable, and sustainable before commercial scale implementation. Regardless of location, each company pursuing oil shale operations will have to validate the environmental and economic viability of its project. API also notes that water use requirements will be evaluated at a finer scale in subsequent NEPA reviews where potential impacts can be assessed on a site and project-specific basis. These future detailed reviews will provide project, technology, and site-specific information on water use to BLM decisionmakers.

#### Additional Note on the Political Nature of BLM Decision-making and Global Commercial Development

As stated previously, BLM has failed to make a compelling technical or legal case for reconfiguring the 2008 OSTS PEIS. As we seek an intellectually honest rationale for the BLM's arbitrary reconfiguration of the 2008 OSTS PEIS, we have examined BLM's recent statements on the economic case for oil shale development.

BLM has repeatedly pointed to the economic viability of oil shale development (or rather its presumed lack of viability) as a factor in its decision making process. As we have stated previously, we are hard-pressed to understand the connection between the viability of commercial oil shale technologies and whether certain lands should be made available for oil shale development in the future and believe they are entirely separate issues. This is a technologically intensive industry and as with other high-tech industries, development takes time. Progression towards development of U.S. oil shale resources also requires a strong, positive, partnership between industry, financial markets and the federal government. Industry and capital investment have responded negatively to the uncertain terms, uncertain regulation, and policies under this Administration's stewardship of the federal oil shale program.

However, since BLM has chosen to include it as a factor in its decision making process, we would like to provide for BLM more insight into commercial oil shale development globally.

It is a fact that several technologies have been developed around the world and that oil shale has been produced on a commercially viable basis for decades outside of the United States. A close examination of activities, technologies, and government policies that have been set into motion elsewhere in the world indicate that, where government policies promote rather than prohibit commercial-scale oil shale development, existing technologies are already in place that can successfully process oil shale resources in a manner that complies with strict environmental standards.

From Estonia, where commercial-scale oil shale development has taken place for decades, to Jordan, where foreign companies have made recent and significant investments toward the eventual development of oil shale, governments have instituted policies that recognize and promote the value and significance of this natural resource in terms of its benefits to their economic, energy, and national security. More recently, renewed interest in this resource has been sparked in Israel, where oil shale deposits could yield billions of barrels of domestic oil. The cases provided below demonstrate that the U.S. might well follow examples set by these governments in other parts of the world.

## Estonia

The Estonian government's National Development Plan for the Utilization of Oil Shale<sup>2</sup> sets forth the strategy for developing oil shale in the country from 2008-2015. Approved by the Estonian parliament in October 2008, the Plan is based on securing a stable supply of oil shale energy and energy independence, as well as achieving increased efficiencies in and reduced environmental impacts of oil shale mining and use. The plan notes the energy security and economic benefits of the country's oil shale resource, while also seeking to diversify its energy portfolio by immediately establishing an annual upper limit of 20 million tons of oil shale mining capacity and a 15 million ton upper limit by 2015. To mitigate environmental impacts associated with oil shale mining and use, the

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<sup>&</sup>lt;sup>1</sup> In its February 3, 2012 announcement of the DPEIS, BLM justified its preferred alternative selection by stating that "[t]o date, technological and economic conditions have not combined to support a sustained commercial oil shale industry in the United States,..." and in its April 14, 2011 "Notice of Intent to Prepare a Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale," BLM stated as its rationale that "[a]s there are not economically viable ways yet known to extract and process oil shale for commercial purposes, the BLM, through its planning process, intends to take a hard look at whether it is appropriate for approximately 2,000,000 acres to remain available for potential development of oil shale, and approximately 431,224 acres of public land to remain available for potential development of tar sands."

<sup>&</sup>lt;sup>2</sup> See National Development Plan for the Utilization of Oil Shale 2008-2015, Ministry of the Environment of the Republic of Estonia, Tallinn 2008, available at <a href="http://www.envir.ee/orb.aw/class=file/action=preview/id=1155858/P%F5levkivi\_arengukava\_+EN.pdf">http://www.envir.ee/orb.aw/class=file/action=preview/id=1155858/P%F5levkivi\_arengukava\_+EN.pdf</a>; and Ministry of the Environment, News, "Riigikogu approves development plan for use of oil shale," available at <a href="http://www.envir.ee/1082834">http://www.envir.ee/1082834</a>.

plan calls for the implementation of modern technologies, acceleration of the recycling of residues, and instituting new environmental charge rates for the use of oil shale and related groundwater needs.

Today, the Estonian energy company Eesti uses two Enefit-140 units at its Estonian oil plant to process oil shale in the country. Enefit-140 uses solid heat carrier technology to produce liquid fuel and retort gas. The patented technology relies on a three-part process comprised of the following stages: drying, thermal decomposition, and combustion. The plant's two units can process up to 140 tonnes of oil shale per hour and annually produce up to 240,000 tonnes of liquid fuel (1.5 million barrels) and 60 million Nm3 of retort gas, which can be used to produce hydrogen and power. In recent years, annual production levels have increased to 1 million barrels of liquid fuels and 40 millions Nm3 of retort gas. Improvements to the units' design have increased their online time from about forty-five percent to nearly eighty percent, exceeding the plant's planned capacity of seventy-five percent.

In terms of the impact of this process on the environment, this oil shale production does not require the use of water, and only about one percent of the production waste is comprised of total organic compounds. In addition, carbon dioxide emissions from liquid fuel production are notably less than the emissions emanating from the generation of electricity from oil shale, since most of the carbon remains in the liquid fuel. In spite of production volume increases, technological advances have enabled Eesti to reduce the amount of pollution discharged from the production of liquid fuels.

These developments are not being conducted without any environmental scrutiny. Oil shale activities in Estonia are subject to fifty-five international conventions and agreements that contain environmental restrictions. Included among them are the U.N. Convention on Biological Diversity and European Commission Directives 79/409/EEC pertaining to the conservation of wild birds, 92/43/EEC relating to conservation of natural habitats and wild fauna and flora. These provisions require the protection of endangered species and their habitats, with protected areas that restrict geological and mining activity.

#### Jordan

The Government of Jordan has estimated that the country is home to between 50 and 70 billion metric tonnes of identified oil shale reserves, ranking third in the world. Studies conducted since the 1960's indicate that oil shale deposits are located in more than 60% of the country.

While it has traditionally relied on imported energy to meet most of its needs, Jordan's National Energy Strategy for 2007-2020 is focused in part on achieving greater energy independence by increasing the country's use of domestic energy resources, including oil shale. In order to raise the portion of domestic energy resources from 4% in 2008 to 25% in 2015 and 39% in 2020, the country aims to raise oil shale's contribution to the nation's energy portfolio to 11% in 2015 and 14% in 2020. This would require an estimated \$1.4 to \$3.8 billion in investments in oil shale exploration.

At the same time, the Jordanian government has embarked on a comprehensive mission to craft a regulatory environment that ensures responsible development of the country's oil shale resources. Oil shale projects must comply with a variety of rules and standards, including World Bank/International Finance Corporation guidelines, Equator Principles, reasonable and prudent operator standards, and emission limits, which are included in concession agreements. While commercial-scale oil shale production in Jordan has not yet taken place, international companies are devoting significant resources toward achieving that reality.

For example, following a formal agreement reached with the Jordanian government in 2009, the Jordan Oil Shale Company (JOSCo), a wholly-owned subsidiary of Royal Dutch Shell (Shell), registered as a company in Jordan to explore the potential for commercial development of oil shale resources in the country using proprietary In situ Conversion Process (ICP) technology. The area to be assessed is located on 22,250 km² of land on three tracts in the central, southern, and northwestern parts of Jordan.

Shell's ICP technology, which is currently under development but has been the subject of research and testing since the early 1980's, does not rely on incineration or mining and surface retort techniques to produce energy from oil shale. Rather, ICP uses underground heaters to raise the temperature of the oil shale in place to remove the kerogen and hydrocarbon gas below ground, and then relies on conventional methods of extraction to produce the resources. As a result, the waste that is generated during the separation process remains underground.

Additional benefits of ICP technology include the capacity to access oil shale resources without mining, its ability to produce higher quality crude oil and larger quantities of oil and gas more efficiently, requiring a smaller surface area than other production techniques.

#### Israel

According to the Israeli government, oil shale deposits are present in 15% of the country,<sup>3</sup> and one assessment estimates that the total amount of oil shale in place in Israel to be close to 250 billion barrels. In turn, public policies have sought to promote investment in the development of these resources.

For example, the Ministry of Energy and Water Resources' Energy Research and Development Department has sought to promote technologies that can turn oil shale into an energy resource to provide an antidote to "excessive fuel price increase or supply difficulties." In addition, the Ministry's Earth Science Research Administration seeks in part to maintain the scientific infrastructure for oil shale. 5

Israel Energy Initiatives Ltd (IEI), a subsidiary of U.S.-based Genie Energy, has been working to develop a means to produce clean transportation fuels from oil shale using In-Situ conversion technology.<sup>6</sup> In 2008, IEI obtained an exclusive exploration and production license from the Israeli government in an area covering 70,000 acres with an estimated 40 billion barrels of oil.<sup>7</sup> This area is located within Israel's Shfela basin, which has been estimated to hold approximately 150 billion barrels of oil.<sup>8</sup> IEI's Chief

<sup>&</sup>lt;sup>3</sup> See Reuters, "Oil shale may help energy independence," May 8, 2011, available at <a href="http://www.ynetnews.com/articles/0,7340,L-4061436,00.html">http://www.ynetnews.com/articles/0,7340,L-4061436,00.html</a>.

<sup>&</sup>lt;sup>4</sup> See Ministry of Energy and Water Resources, Energy Research and Development Department, available at http://energy.gov.il/English/Subjects/RAndDChiefScientist/Pages/GxmsMniEnergyResearchAndDevelopmentDepartment.aspx.

<sup>&</sup>lt;sup>5</sup> See Israel Ministry of Foreign Affairs, Ministry of National Infrastructures, available at <a href="http://www.mfa.gov.il/MFA/MFAArchive/2000">http://www.mfa.gov.il/MFA/MFAArchive/2000</a> 2009/2002/10/Ministry+of+National+Infrastructures.htm#energy.

<sup>&</sup>lt;sup>6</sup> See IEI, About Us, available at http://www.iei-energy.com/aboutus.php.

<sup>&</sup>lt;sup>7</sup> See IEI, About Us, available at <a href="http://www.iei-energy.com/aboutus.php">http://www.iei-energy.com/aboutus.php</a>; IEI, Home Page, available at <a href="http://d129998.u26.alsonetworks.com/index.php">http://d129998.u26.alsonetworks.com/shale\_oil-natural\_treasure.php</a>.

<sup>&</sup>lt;sup>8</sup> See IEI, What is Oil Shale?, available at http://d129998.u26.alsonetworks.com/what\_is\_oil\_share.php.

Executive Officer has stated that successful production in the license area could yield 50,000 barrels of oil per day (20% of Israel's consumption rate) for thirty years.

In sum, as other countries as well as the United States seek to become more energy self-sufficient and chart courses to greater economic and national security, the game-changing impacts associated with commercial development of oil shale resources is spurring governments to take actions that will help turn potential benefits into reality. In such cases, businesses are responding by making investment decisions and applying proven technologies to oil shale development in a manner that could significantly meet the growing energy demands of citizens around the globe.

With the passage of time, oil shale production technologies that have developed and advanced over time will continue to evolve and achieve even greater efficiencies and improvements. How this vast resource is developed in the United States remains uncertain. U.S. Federal actions that create obstacles or uncertainty about the potential for commercial-scale development will surely be a limiting factor.

During this period of unprecedented economic and geopolitical uncertainty, the examples seen in Estonia, Jordan, and now Israel should serve as a wake-up call to action for decision-makers in the United States and countries around the world who have an interest in achieving greater energy independence.

#### Conclusion

For the reasons discussed above and further outlined in Attachment 1, API strongly urges BLM to adopt Alternative 1, the No Action Alternative. The 2012 OSTS DPEIS provides no convincing logic for changing the thoughtful conclusions BLM reach in the ROD for the 2008 OSTS PEIS. Accordingly, API recommends that current (2008) BLM land use plan allocations for oil shale and oil sands leasing be retained as written and not amended.

In closing, the API appreciates the opportunity to comment on the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming and asks the Bureau of Land Management to carefully consider our comments and address them as it finalizes the OSTS PEIS document. Should you have any further questions, please contact me at 202-682-8260 or kennedye@api.org.* 

Sincerely,

Emily Kennedy Policy Advisor

American Petroleum Institute

Emily Kennedy

No.	PDEIS Section No.	Page No.	Line No.	COMMENT
1	General			The large document has incorporated much of the information from the 2006-2008 EIS effort and does reflect updating data in some sections. This is particularly important when discussing important resource issues such as water. Please consider making a statement to the effect that this document represents the current state of the information when many references are pre-2007. The statement could be included as part of the opening remarks in each of the resource descriptions in Section 3.
2	Executive Summary			The ES addressing only the alternatives and BLM's preferred alternative lacks a summary discussion of the resource findings presented in Sections 3-6
3	Executive Summary	ES-6	28	BLM inserts uncertainty into the available lands restriction by adding "may issue" to this limitation. Suggest rewording to "or the DOI has promulgated through regulation"
4	Executive Summary	ES-6	31	BLM inserts uncertainty into the available lands restriction by not defining specifically what Utah & Wyoming have "recently completed". Please direct the reader toward a specific document that identifies the applicable ACECs or where they are discussed.
5	1.4.1	1-17	31	Why bother discussing commercial projects in this EIS when it is stated that this document's NEPA scope is limited to something less than the RD&D level of projects? The RD&D leases do have a PRLA included but it is stated that further NEPA review is required prior to commercial development.
6	1.4.3	1-21	15	How different are the oil and gas lease stipulations relative to those seen in the RD&D leases to date? Why not include current RD&D lease stipulations in the BLM handbook? It would demonstrate similarities or differences among industries to the Resource Manager.
7	2.1	2-1	27	A more informed discussion on the methods/process for oil shale and oil sands resources recovery could be inserted in this section. Alternatively, reference to select subsections of 4.0 and Appendix A could be made to indicate that more technology description is included in the document.
8	Table 3.1.1-1	3-2 & 3-13	2	Suggest deletion of the Utah GSENMM Plan from the table to consistently show the 10 RMP that are affected in prominent tables. Acknowledgment of the RMP could be inserted in the text following the table similar to the presentation on page 1-19 since the existing leased acreage will likely never be developed nor acreage be available for leasing in the future.
9	Table 3.1.2-1	3-41		The data presented is that available in 2006 as noted in the footnote. Please review and update the table as needed to reflect more recent information (References note that this was reviewed in October 2011). This could be done for Section 3 in general as much of the document appears based

				on information gathered for the 2008 EIS
10	3.12	3-276	30	The socioeconomic history of oil shale development in the area suggests that the maintenance of a current baseline is important in keeping the future impacts in perspective. The socioeconomic section does reflect current information; however, the tables related to the environmental justice
				discussion reflect the pre-2010 census data. It is suggested the section be reviewed and updated as
				necessary to reflect current data. This comment is applicable to similar discussions in Sections 4 thru 6.
11	4.1.1	4-4	2	For completeness, consider giving a short reason that surface mining of oil shale in Colorado is not being discussed in the EIS.
12	4.1.6	4-14	11	The premise that coal is the energy source for oil shale and oil sands development is not reasonable in today's or predicted future energy markets. For comparative purposes consider providing the summary of emissions if natural gas was used as the energy source. Such a comparison would allow the reader to infer their own magnitude of impacts when reviewing impacts presented in the remainder of the document that are based solely upon coal as a fuel versus a project sited gas fired power plant.
13	4.3.1.1	4-25	19	Assuming Comment 15 was accepted and addressed, a sentence could be added that long-term disturbance of electrical transmission lines would be reduced if power were generated at the project site. Similar remarks could also be added as appropriate in other resource discussions.
14	4.5.1.2	4-36 & 4- 37	45	BLM discussion on climate change cites reports and numbers where they acknowledge the values have a high level of uncertainty. It might be better to return to the qualitative discussion consistent with the rest of the section than contain numbers with high uncertainty.
15	4.5.1.3	4-39	9- 21	Data are presented from operations monitoring in this paragraph; however the information lacks good context such as information on background or reference well data to demonstrate the impact of the RD&D activity.
16	4.5.1.3	4-39	24	Consider review and possible revision to the remarks regarding Chevron's project based upon recent announcements regarding their oil shale leases.
17	4.5.1.4	4-40	27	Consider adding some context to the change in groundwater flow by giving the range of flows in Yellow Creek in the vicinity of the study.
18	4.6.1.1	4-55	46	Reference to oil sands could be deleted in this sentence as well as others in the section because the focus is oil shale development.
19	4.6.1.1.1	4-57	4	Consider providing an update on the status of the proposed rulemaking for the final PEIS.
		101		

20	4.8.1	4-74	1	Table 4.8.1-1 presents the magnitude of unmitigated impacts to the aquatic resources. A more reasonable assessment would to present the magnitude after application of generally accepted mitigation practices typically required by BLM in permitted actions. This comment is also
21	4.9.1.1.2	4-142	15- 16	applicable to other resource topics where the magnitude of impacts is presented before mitigation.  Typo: What is the need for the italic in this paragraph?
22	4.9.1.3	4-148	32	Typo: Similar vs. Similarly
23	4.9.1.3	4-149	35	Consistency is suggested when discussing new power plants sizes (Pg. 4-13 Line. No. 38).
24	4.9.1.4.2	4-152		The discussion on power plants in the section on transmission lines and pipelines appears out of place. Would such a discussion be better in Section 4.1.6 leaving only the focused remarks on visual resources (i.e. power plant have a visual impact)
25	4.15	4-200	6	Consider restating the sentence "If exposures" because emissions will be limited by controls and worker safety requirements that are stipulated in the permits issued for operations.
26	5.1.1	5-5	20 - 29	What is the justification for the authors in the oil shale and oil sands evaluation of impacts use of different external energy sources, coal fired power plants and on site natural gas/propane respectively? A similar change is also noted for other parameters defined in the assumptions. Also compare Tables 4.1.1-1 and 5.1.11 for impact values.
27	Chapters 4 & 5			The impact descriptions presented in Sections 4 & 5 contains information that are duplicative or common to both oil shale and oil sands development. Such information could be presented once. This allows the mineral specific information to be presented more concisely and with a short reference back to the general information when needed. The present approach makes finding unique Area information difficult. Much of Chapter 5's 162 pages could be reduced about 90 % by presenting only the unique oil sands impact discussion.
28	Table 6.1.4-4	6-205		The listing of the mammal species needs to be reviewed and several bird entries deleted and if not already listed, added under the bird section of the table.
29	6.1			The treatment of comparing alternatives among the resources is inconsistent. For example, land use and water use describe impacts by alternative but wildlife is done by state. Consider placing a table at the front of the section providing guidance on what level of analysis will be provided for each resource and resource alternative discussed. (The comparison of alternatives is more fully presented in Section 6.5.1)
30	Chapters			The impact descriptions presented in Sections 6.1 and 6.2 contains information that are duplicative

	6.1 & 6.2			or common to both oil shale and oil sands development. Such information could be presented once. This allows the mineral specific information to be presented more concisely and with a short reference back to the general information when needed. The present approach makes finding unique Area information difficult. Much of Chapter 6.2's 251 pages could be reduced presenting only the unique oil sands impact discussion.
31	6.1.1	6-4	40- 44	The statement that oil shale and oil sands development is largely incompatible with oil and gas development is misleading. Use Agreements and various drilling technologies are available to resolve conflicts among willing parties. Mineral development conflicts would occur where resource recovery would use the same extraction method (i.e. surface or underground mining) on the same land; however, precedent leasing would typically result in a design and subsequent lease agreements that is compatible with development. The Enefit RD&D project is an example where both mining and oil and gas development co-exist (see page 6-122).
32	6.1.1.11.2	6-63		Table 6.1.1-13 should be updated to reflect the more recent community input data
33	6.1.2.10	6-113	32- 33	It seems unreasonable to state the act of leasing has the potential to adversely impact cultural resources by lease terms limiting an agency's ability to avoid, minimize, or mitigate adverse effects of proposed development. This statement should be deleted or expanded upon to describe the lease terms that allow a lessee to impact cultural resources. See page 4-158 or 5-118 for a possible expansion of this thought. A similar situation is noted in Section 6.1.3.9, pg. 6-162, line 26.
34	6.1.3.4	6-125		The purpose of Alternative 3 needs to be more fully explained. Sec 6.1.3 appears to summarize the prior NEPA work. The RD&D projects have all the commercial acres identified. It appears that Alternative 3 effectively closes future lands to any commercial development (except PRLA) and would only allow RD&D projects.
35	6.1.3.5	6-129	4-6	What does this sentence add to defining the GHG emission concerns for the project? Consider adding the period at the end of the sentence and expanding the discussion to include any data on expected emissions.
36	6.1.4	6-171	19	Alternative 4 proposes to remove lands that are "proposed for" future planning restrictions in addition to those lands removed by BLM action since the 2008 PEIS. The analogy is similar to Candidate T&E species status to the Listed species. The listed has the full support of law where the candidate does not.
37	6.1.5	6-224		This is most useful section in the EIS for assessing comparatives. Information from this section could be put in tabular form to expand the Executive Summary.
38	Table	6-246		The information on coal mining and preparation impact should be reviewed and updated as

	6.1.6-2			appropriate. More recent data from the three western state agencies regulating mining would be the
				source for such an update as opposed to the central / eastern state mining operations.
39	Table	6-249		The information on coal fired power plant impact should be reviewed and updated as appropriate. In
	6.1.6-3			addition, an analysis of gas fired power plant impact should be added to reflect the future trend in
				electric power generation.
40	6.1.6.3.11	6-304	44	The information on socioeconomic impacts should be reviewed and updated as appropriate using
				data from those current RD&D developments and projecting forward when appropriate.
41	6.1.6.3.13	6-307	30	The discussion of hydraulic fracturing should be reviewed and updated based on information that is
				more recent.
42	6.1.6.3.13	6-311	38-	A discussion of gas-fired power plant should also be provided, as coal may not be the fuel choice for
			42	newly constructed power plants.